Main Cross Sections

Cross Section

cross section (barn)

10^{-1}

10^{-2}

n_2n

neutron energy(eV)

$*10^{6}$

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20
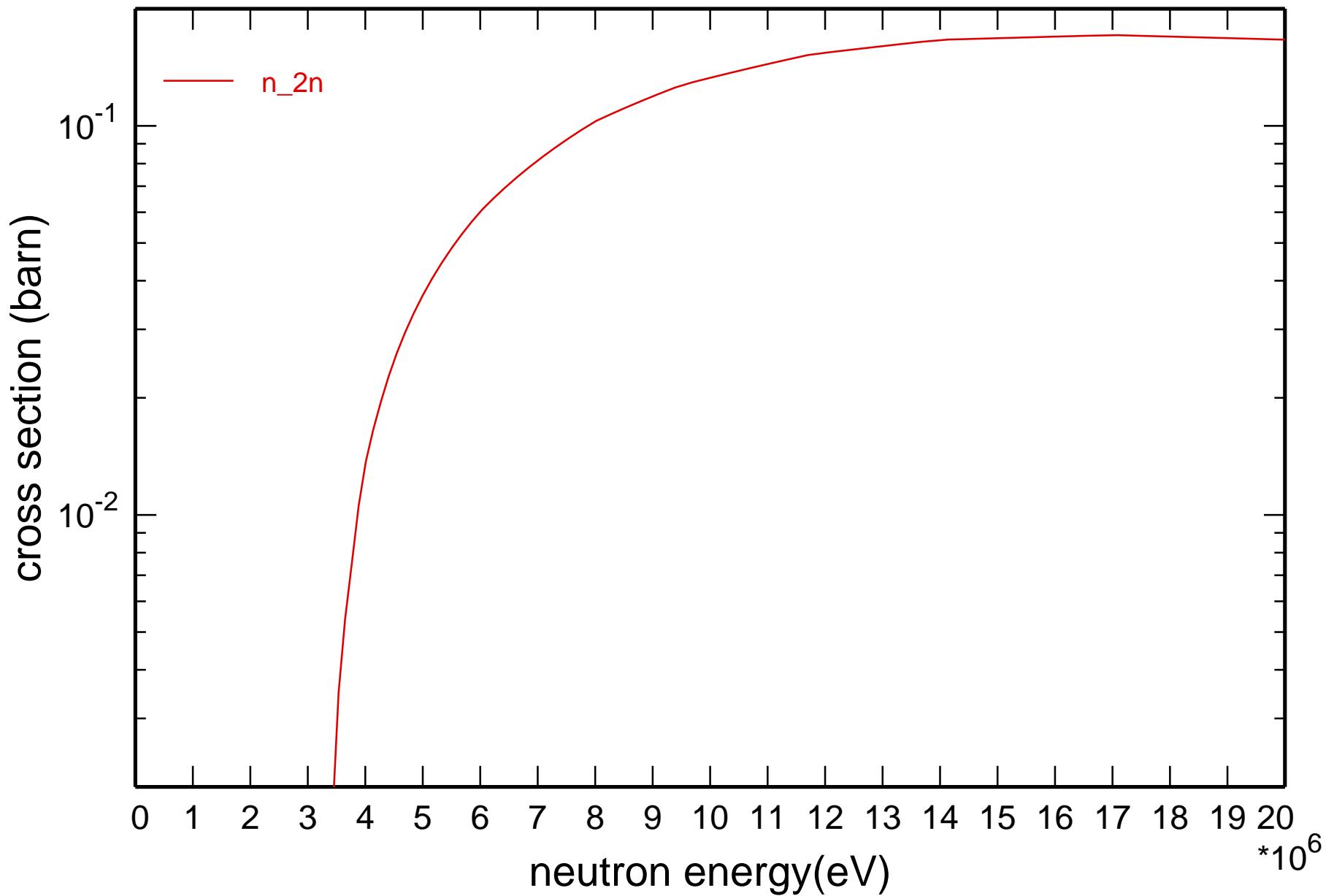
Angular distribution (CMS)
Elastic
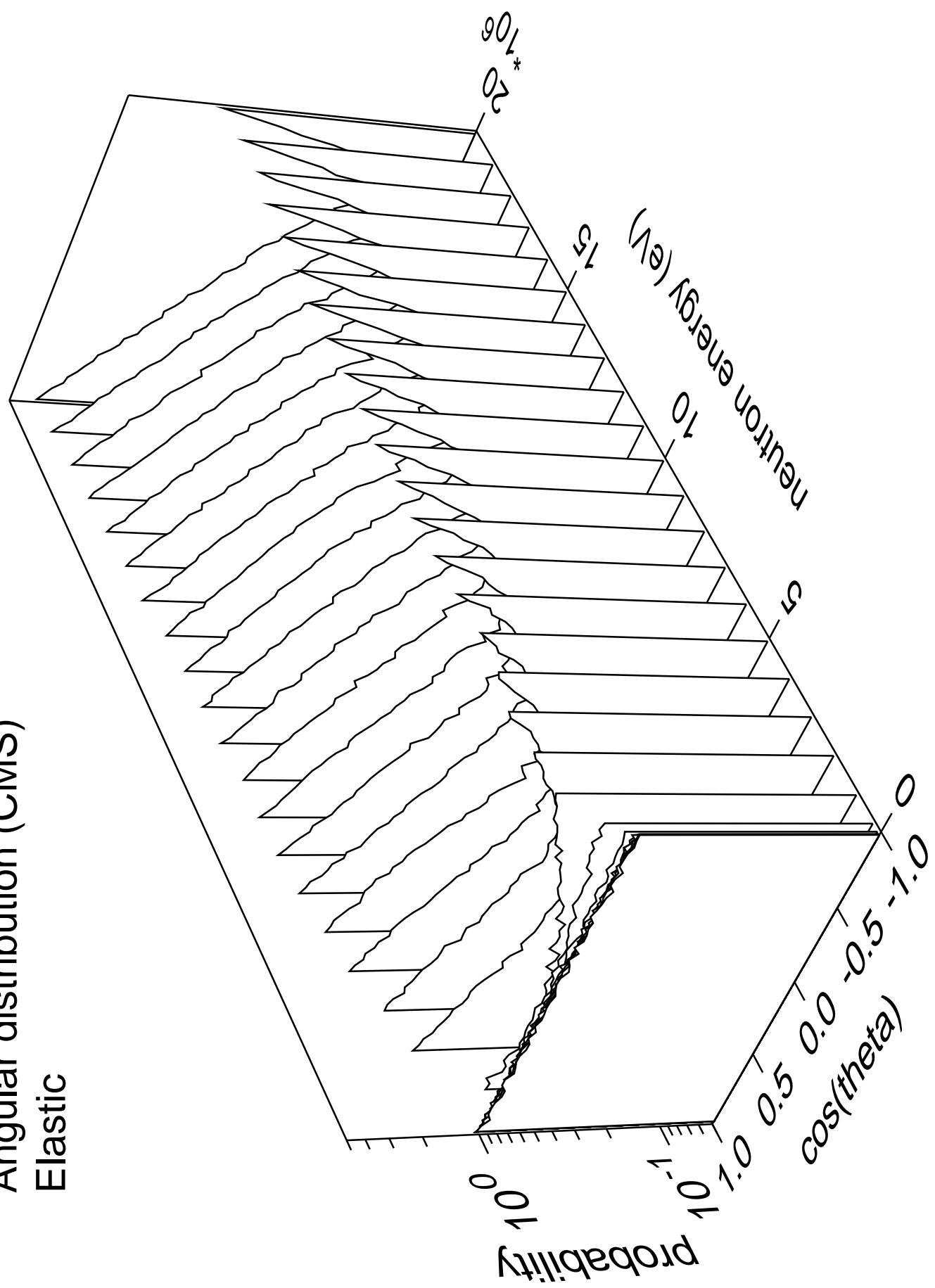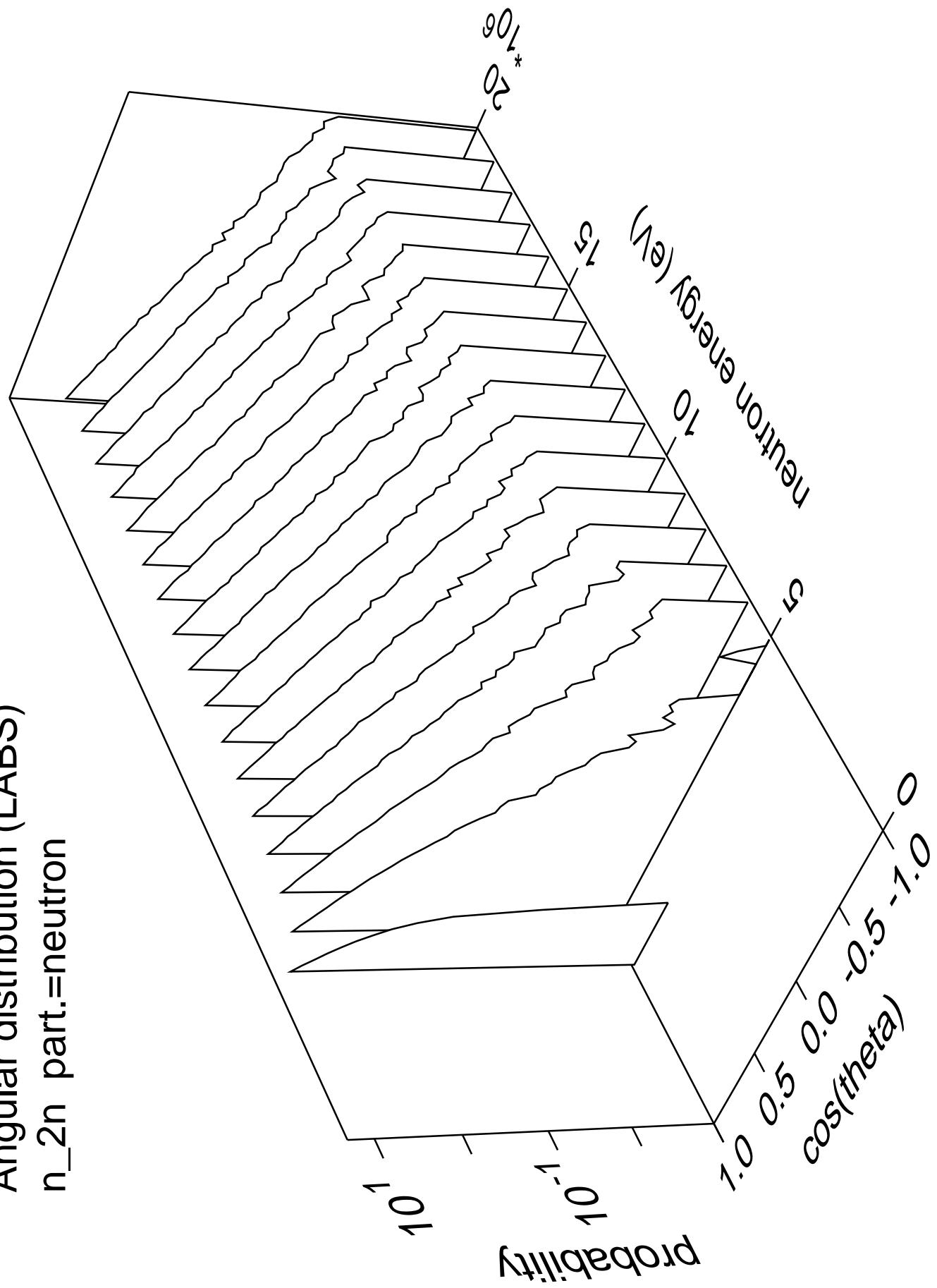
probability

neutron energy (eV)

cos(theta)

Angular distribution (LABS)
n_2n part.=neutron

probability

10¹

10⁻¹

neutron energy (eV)

20
*10⁶

15

10

5

0

1.0   0.5   0.0   -0.5   -1.0

cos(theta)

Angular distribution (LABS)
n_2n part.=proton

probability

10^1

10^{-1}

neutron energy (eV)

20 $*10^6$

15

10

5

0

1.0   0.5   0.0   -0.5 -1.0

cos(theta)

Energy distribution (LABS)
n_2n part.=neutron

probability

10^1

10^{-1}

energy (eV)   *10⁶

0   5   10   15   20

neutron energy (eV)

5   10   15   20   *10⁶

Energy distribution (LABS)
n_2n part.=proton

probability

energy (eV) *10⁶

neutron energy (eV)

20 *10⁶
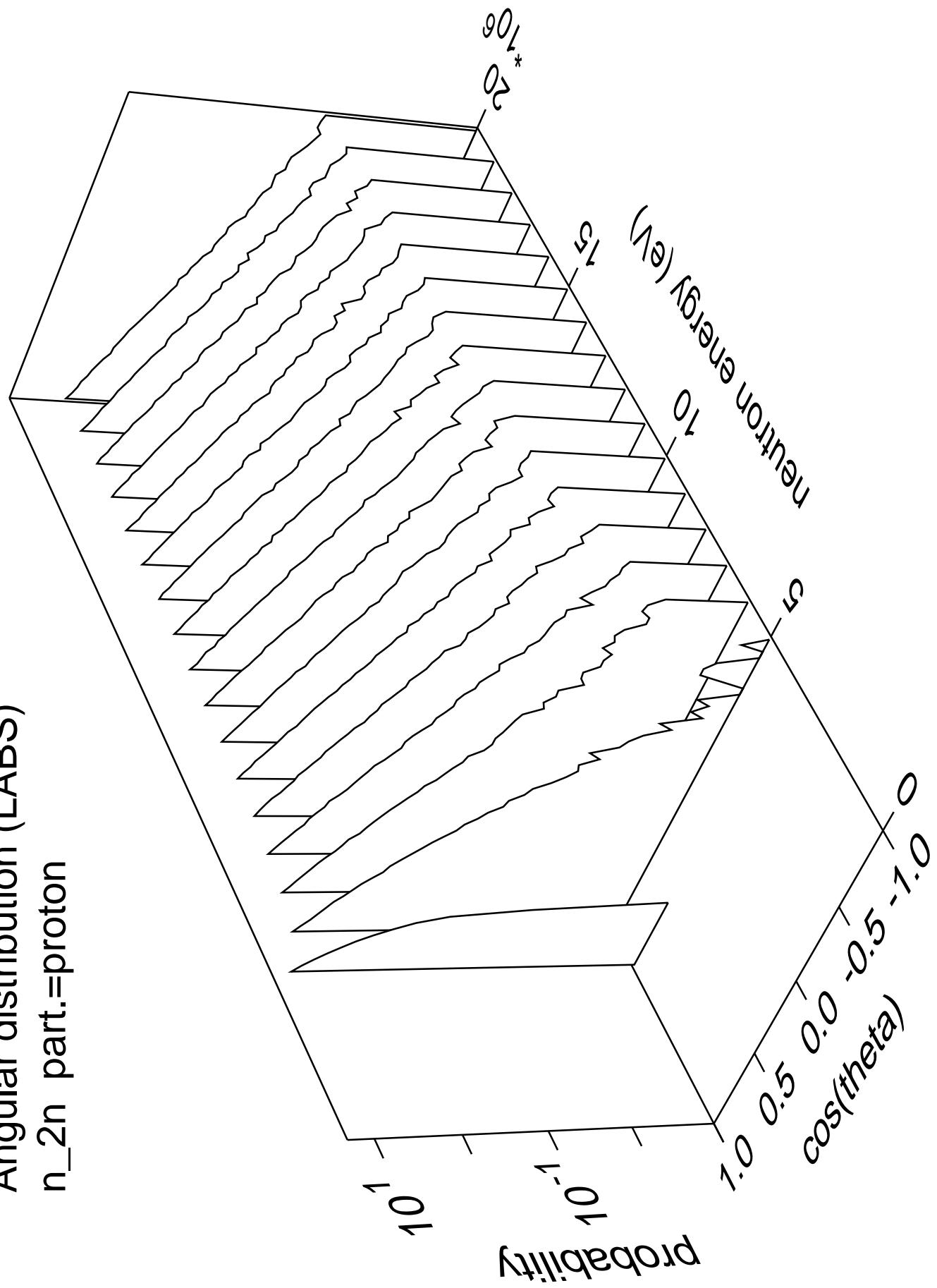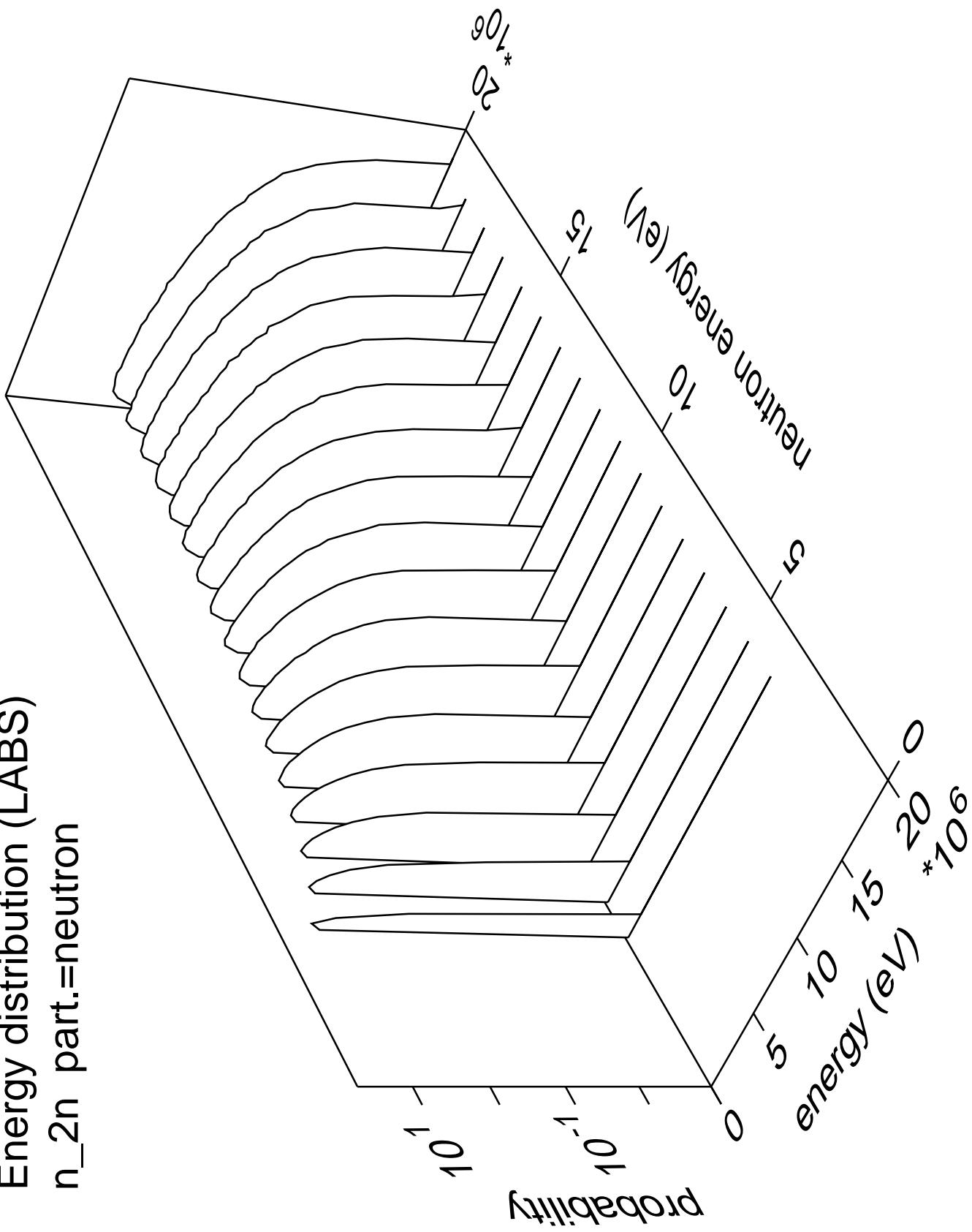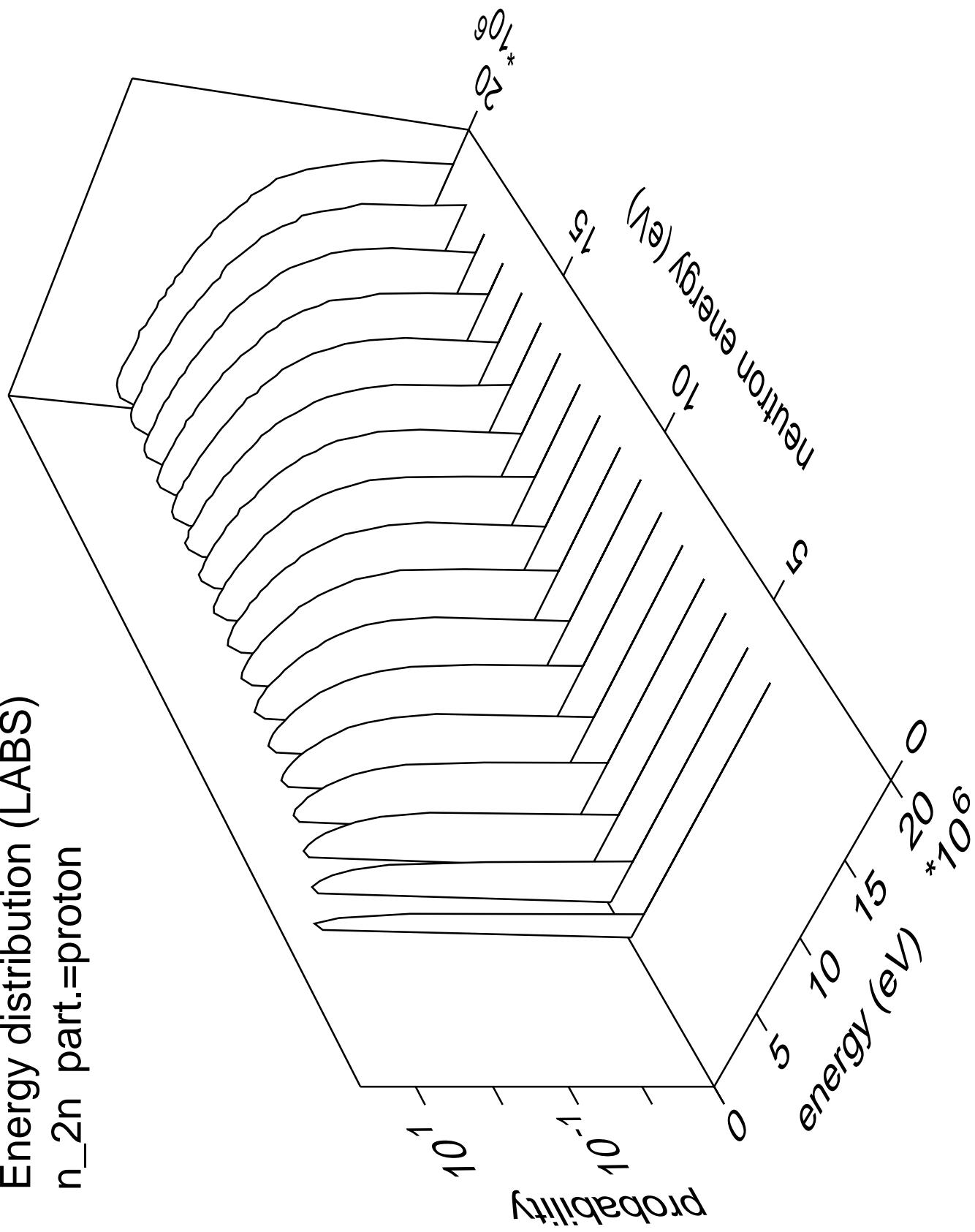
Gamma energy distribution
Capture

probability

neutron energy (eV)

gamma energy (MeV)

$20^{*}10^{6}$

15

10

5

0

5

10

15

20

0

50

100
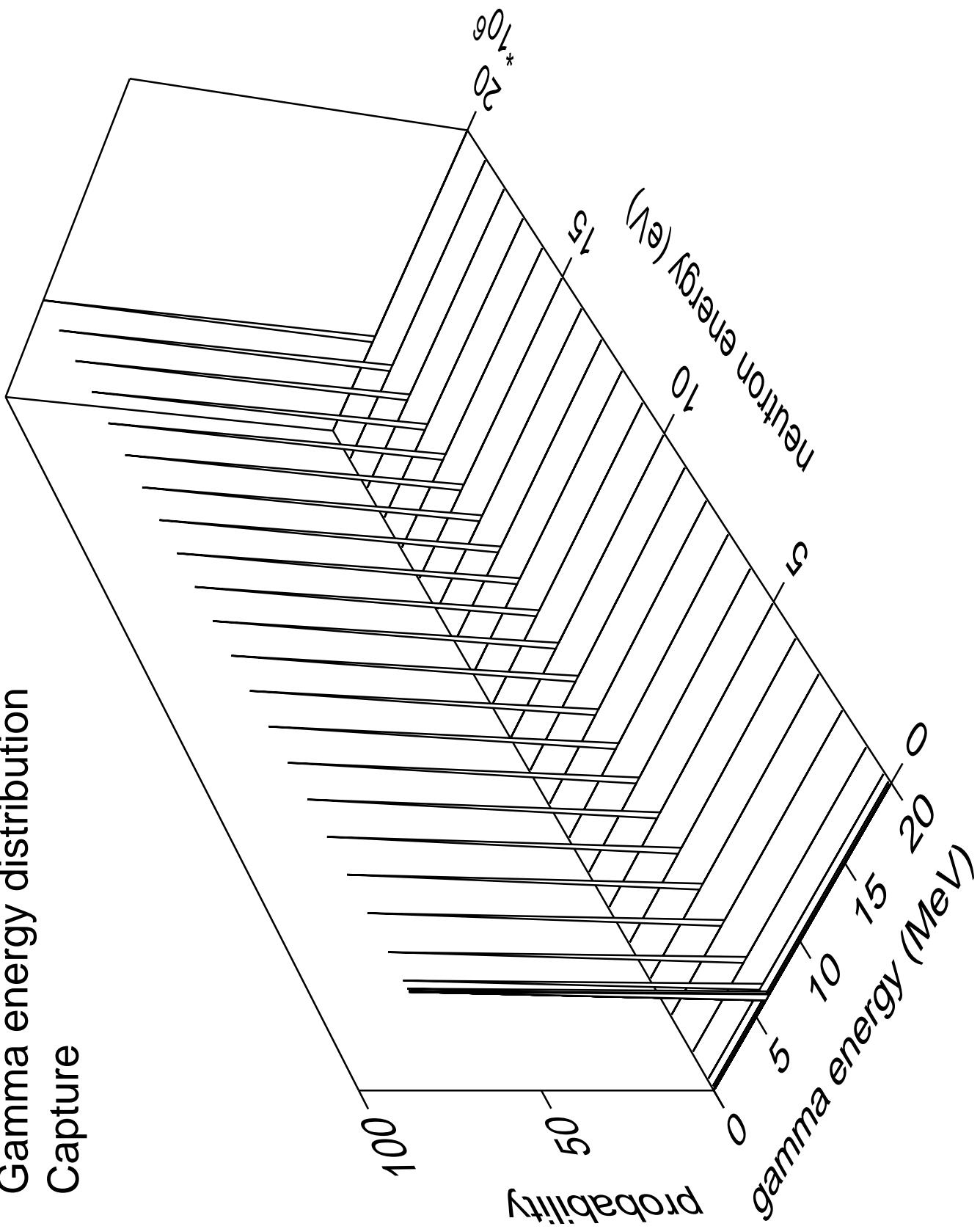
Gamma angles distribution
Capture

probability

neutron energy (eV)

cos(theta)

20 *10⁶

15

10

5

0

1.0 0.5 0.0 -0.5 -1.0
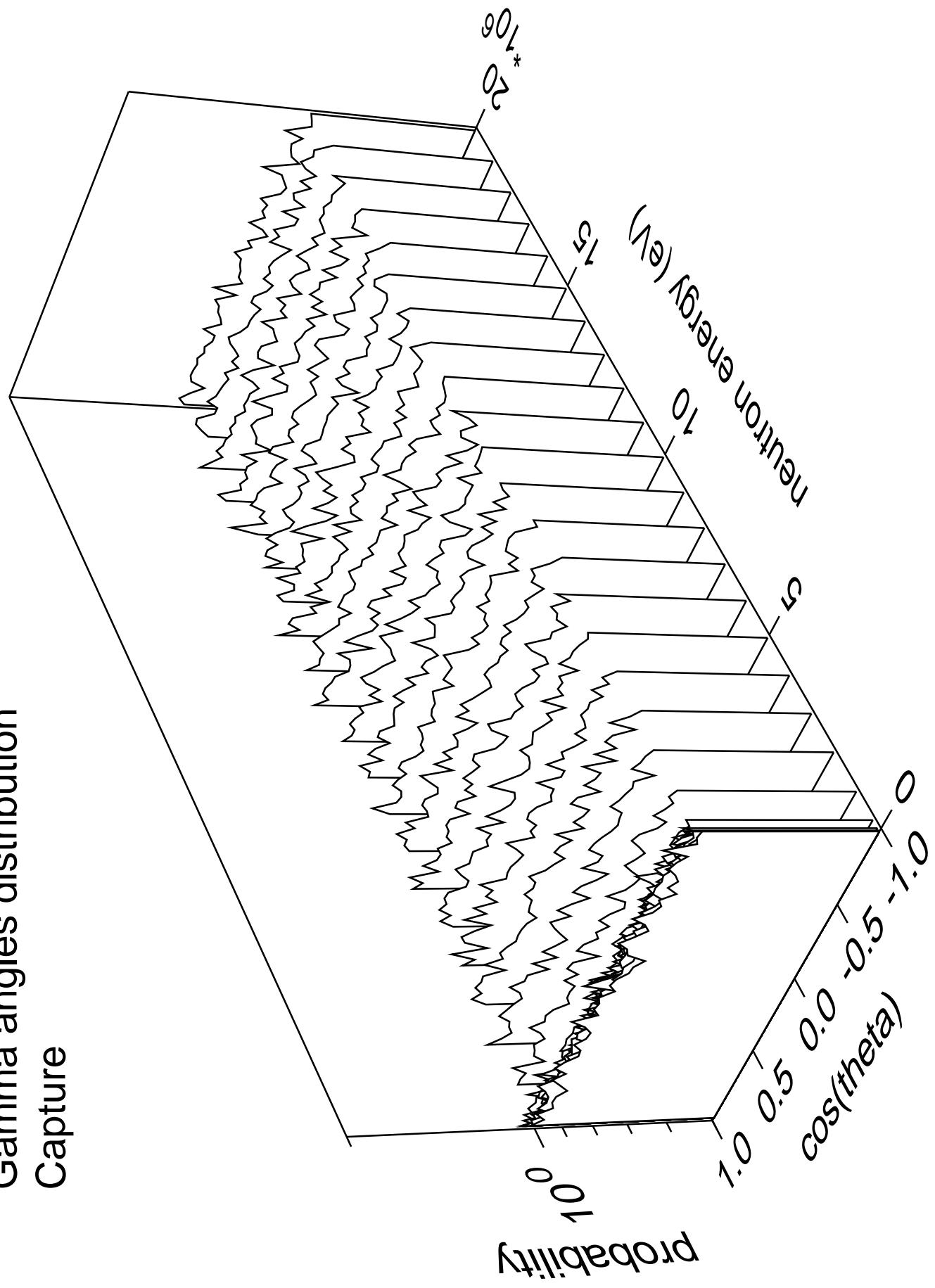
Gamma multiplicities distribution
Capture

neutron energy (eV)

multiplicity

probability

20 *10⁶